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* Ref. Analytical Chemistry, 33, 1138 (August 1961).

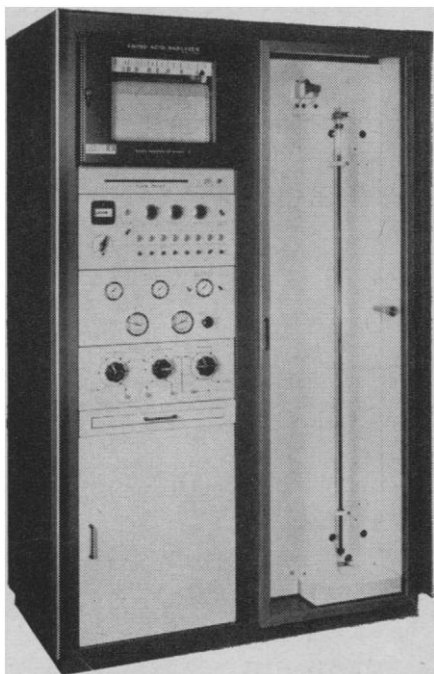
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quired it previously, presumably from their acquaintance with algebra. To this extent the expressions were meaningful to both the human subjects and the interpreter of the program.

Does the program distinguish between "undesirability" and "inapplicability" of operators? The GPS contains both tests of desirability (involving comparison of the effects of an operator with current goals) and tests of applicability (involving comparisons of the operator with the input expression). *Either* test can be applied first. If, as in the case of rule 3 or 4, an operator is neither desirable nor applicable, it will be rejected by whichever test is applied first. At the time the simulation in the *Science* article was made, the version of GPS running on the IBM 7090 gave priority to the applicability test. To fit the behavior of subject 9, a hand-simulated variant was employed that altered the relation between the two tests, producing the result shown in the trace. This is a good example of the kinds of changes in GPS that are required to adapt it to individual differences among our subjects.

We might mention that our traces of runs on the IBM 7090 (about 800 of them), our hand simulations (several dozen), our recordings of human subjects (about 30 hours), and decks or tapes of our GPS program, written in IPL-V, can be made available to fellow scientists who wish to work with them and arrive at their own interpretations.

ALLEN NEWELL
HERBERT SIMON

*Carnegie Institute of Technology,
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Recording Animal Activity

In a recent issue of *Science* [134, 730 (1961)], Kavanau and Norris describe an excellent application of the "capacitance-sensing" activity technique in behavior studies of burrowing animals. However, they state that "although the method is highly versatile, it apparently has not been used heretofore to study animal movements."

This method of recording animal activity was used and reported by Backlund and Ekeroot 11 years ago in a paper entitled "An actograph for small terrestrial animals" [*Oikos* 2, 213 (1950)]. These authors used the technique to record the activity of blowflies (*Calliphora erythrocephala*), and their paper has the advantage of including

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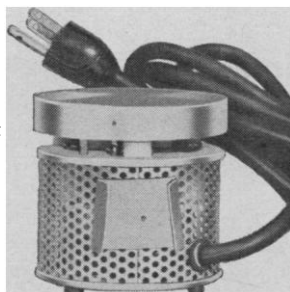


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the circuit diagram of the oscillator apparatus, which can be built in the laboratory. Unfortunately, they were not able to pursue their studies with this technique, but it is to be hoped that Kavanau and Norris will be able to use the method of Backlund and Ederoot to its fullest extent.

DONALD K. EDWARDS

*Department of Forestry,
Victoria, British Columbia*

We are indebted to D. K. Edwards for calling attention to the note of Backlund and Ekeroot. It substantiates our belief that the method has great potential for other applications.

Our use of the technique is quite different from that of the Swedish workers. They sought to record activity periods of blowflies confined under a petri dish, while our objective is to follow both the periodicities and the gross locomotory displacements of burrowing animals whose activities cannot be seen. We hope that others will apply the technique to new situations. Most biologists will find it more practical to use commercially available Hartley oscillators than to build their own.

J. LEE KAVANAU

KENNETH S. NORRIS

*Department of Zoology,
University of California, Los Angeles*

An Unfortunate Event

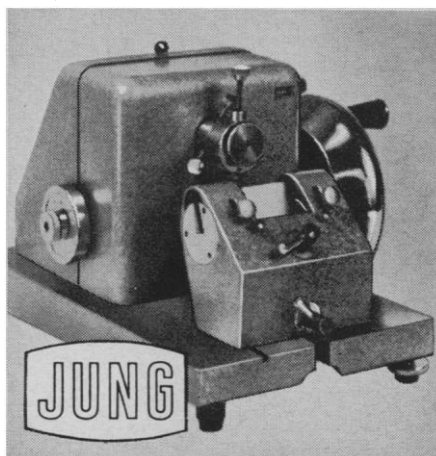
I am writing with reference to your note entitled "An unfortunate event" [*Science* 134, 945 (1961)] concerning the report by Pande, Shukla, and Sekariah. Indian scientists are equally shocked over this disgraceful affair. This was brought to the notice of M. S. Thacker, director general of the Council of Scientific and Industrial Research, who is also the president of the Association of Scientific Workers of India. He, along with this body of Indian scientists, would like to inform you of our deep regret that such an unfortunate thing has happened.

We also take this opportunity to inform you that, at the initiative of Thacker, disciplinary action has been taken against the authors; one has been retired and the other two suspended. The matter is under investigation by an inquiry committee for determination of final punishment.

D. N. MISRA

*Department of Mathematics,
Lucknow University, Lucknow, India*

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